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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER	
DUONG, DUC T	

ART UNIT	PAPER NUMBER
2616	

MAIL DATE	DELIVERY MODE
08/13/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	09/976,212	PARRUCK ET AL.	
	Examiner	Art Unit	
	Duc T. Duong	2616	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *23 April 2007*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *4,10-16 and 45* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *4,10-12,15,16 and 45* is/are rejected.

7)☒ Claim(s) *13 and 14* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Response to Amendment

1. The indicated allowability of claims 4, 10-16, and 45 are withdrawn in view of the newly discovered reference(s) to Carr et al (US Patent 6,6963,572 B1) and Cheesman et al (US Patent 6,680,933 B1). Rejections based on the newly cited reference(s) follow.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

3. Claims 4 and 45 are rejected under 35 U.S.C. 102(e) as being anticipated by Opalka et al (US Patent 6,259,699 B1).

Regarding to claim 4, Opalka discloses a multi-service segmentation and reassembly (MS-SAR) integrated circuit (fig. 14), comprising a first bus interface PHY;

lookup circuitry 14; segmentation circuitry 10; reassembly circuitry 2; a second bus interface PHY; and a data path extending from the first bus interface to the lookup circuitry, and from the lookup circuitry to the segmentation circuitry, and from the segmentation circuitry to the reassembly circuitry, and from the reassembly circuitry to the second bus interface, wherein both cell-protocol traffic and packet-protocol traffic pass over the data path from the first bus interface, through the lookup circuitry, through the segmentation circuitry, through the reassembly circuitry and out of the integrated circuit from the second bus interface, the lookup circuitry analyzing the cell-protocol traffic and outputting information that causes the cell- protocol traffic to be processed in a first way by the segmentation circuitry and the reassembly circuitry, the lookup circuitry analyzing the packet-protocol traffic and outputting information that causes the packet-protocol traffic to be processed in a second way by the segmentation circuitry and the reassembly circuitry (col. 13 lines 9-24), wherein the integrated circuit is operable in an ingress mode such that traffic is output from the integrated circuit to a switch fabric via the second bus interface, and wherein the integrated circuit is operable in an egress mode such that traffic is received onto the integrated circuit from a switch fabric via the first bus interface (col. 13 lines 63-67 and col. 14 lines 1-37).

Regarding to claim 45, Opalka discloses the integrated circuit is configurable such that the integrated circuit in the ingress mode can output the traffic to either a cell-based switch fabric or to a packet-based switch fabric, mad wherein the integrated circuit is configurable such that the integrated circuit in the egress mode can

receive the traffic from either a cell-based switch fabric or a packet-based switch fabric (col. 13 lines 23-25 and col. 14 lines 40-57).

4. Claim 10 is rejected under 35 U.S.C. 102(e) as being anticipated by Carr et al (US Patent 6,6963,572 B1).

Regarding to claim 10, Carr discloses an integrated circuit 200 (fig. 1) comprising a first bus interface 250-260; means for generating a segmentation trailer 220; means for checking a segmentation trailer 290; a second bus interface 312; a data path extending from the first bus interface to the means for generating, and from the means for generating to the means for checking, and from the means for checking to the second bus interface, wherein both cell-protocol traffic and packet-protocol traffic pass over the data path from the first bus interface, through the means for generating, through the means for checking, and out of the integrated circuit from the second bus interface (col. 14-53), wherein the integrated circuit is operable in an ingress mode and in an egress mode, wherein in the ingress mode the integrated circuit is adapted for segmenting a packet into a plurality of segments, the means for generating a segmentation trailer generating a segmentation trailer and appending the segmentation trailer to one of the segments, the segments being output from the integrated circuit in the form of switch cells (col. 5 lines 11-18), and wherein in the egress mode the integrated circuit is adapted for outputting packet information such that the packet information is transmitted as a packet onto a network, the means for checking receiving a plurality of segments, a last one of the plurality of segments including a segmentation trailer, the means for checking checking the segmentation trailer (col. 5 lines 18-21).

5. Claims 11,15, and 16 are rejected under 35 U.S.C. 102(e) as being anticipated by Cheesman et al (US Patent 6,680,933 B1).

Regarding to claim 11, Cheesman discloses a switching device 100 (fig. 4), comprising a first multi-service segmentation and reassembly (MS-SAR) integrated circuit 102; a switch fabric 103; and a second multi-service segmentation and reassembly (MS-SAR) integrated circuit 104a, a flow of network information passing into the first MS-SAR, and then through the first MS-SAR, and then through the switch fabric, and then through the second MS-SAR, and then out of the second MS-SAR, wherein the flow passing into the first MS SAR is of a first traffic type, and wherein the flow passing out of the second MS-SAR is of a second traffic type (col. 7 lines 62-67 and col. 8 lines 1-18), wherein the switching device can process the flow for all the four following pairs of first and second traffic types: 1) the first traffic type is ATM and the second traffic type is ATM, 2) the first traffic type is ATM and the second traffic type is packet, 3) the first traffic type is packet and the second traffic type is ATM, and 4) the first traffic type is packet and the second traffic type is packet, wherein the first and second MS-SAR integrated circuits are substantially identical integrated circuits (fig. 5 col. 8 lines 30-53).

Regarding to claim 15, Cheesman discloses wherein the switching device is an OSI layer three Internet Protocol (IP) router (col. 8 lines 32-36).

Regarding to claim 16, Cheesman discloses the switching device is an OSI layer two switch that does not perform Internet Protocol (IP) routing (col. 8 lines 32-36).

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

7. Claim 12 is rejected under 35 U.S.C. 103(a) as being unpatentable over Cheesman et al (US Patent 6,680,933 B1).

Regarding to claim 12, Cheesman discloses all the limitations with respect to claim 11, except for the ATM traffic involves AAL5 adaptation layer cells. However, it would have been obvious to a person of ordinary skill in the art, at the time of the invention, to employ such layer into Cheesman's system since such layer is well known and standardized in ATM communications.

Allowable Subject Matter

8. Claims 13 and 14 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Duc T. Duong whose telephone number is 571-272-3122. The examiner can normally be reached on M-F (9:00 AM-6:00 PM).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wing Chan can be reached on 571-272-7493. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

DD
DD

8/8/07
WING CHAN
SUPERVISORY PATENT EXAMINER